Program Area 5: Transportation

I. Introduction and Background

According to the U.S. EPA, driving a car is the single most polluting thing that most individuals do. Motor vehicles emit millions of tons of pollutants in the air each year. In many urban areas, motor vehicles are the largest contributor to ground level ozone, a major component of smog. Cars also emit several pollutants classified at toxics, these toxics are suspected of contributing to over 1,500 cases of cancer each year in the United States. The burning of fossil fuels also contributes to the release of Carbon Dioxide (CO2) into the atmosphere, which many scientists believe contribute to the warming of the planet and can have an effect on global weather patterns. These changes in weather patterns can alter regional precipitation totals and effect crop yields, water supplies and recreation opportunities such as skiing and rafting. Scientists currently are unable to determine which parts of the United States will become wetter or dryer, but there is likely to be an overall trend toward increased precipitation and evaporation, more intense rainstorms, and drier soils.

Pollution control measures have drastically reduced emissions from vehicles in the past 20 years, however, during that same time the total miles traveled has doubled, resulting in higher levels of air pollutants in many parts of the country. In 2005, the State of Colorado's fleet alone burned over 4.2 million gallons of fuel in its vehicles, leading to the addition of 84 million pounds of CO2 being released into the atmosphere.

We believe this provides a great opportunity for state government to lead by example and reduce the amount of petroleum products we use through the purchase of more fuel efficient vehicles, the use of alternative fuels, and the introduction of a variety of transportation alternatives for employees.

II. Environmental and Economic Benefits

The increase in gas and diesel prices can be a strain on State Fleet budgets as well as agency budgets. During 2005, state fleet spent over $8.3 million dollars on fuel. This jump in fuel cost will lead to an increased variable charge for agencies that lease their own vehicles. Alternative fuels such as biodiesel and ethanol have become much more competitive with the price of conventional petroleum products and have considerable reductions in emissions. The production of alternative fuels in Colorado will help to stabilize the price of these fuels and in turn help to budget for our future fuel needs.

Many studies have shown that hybrid vehicles will have a cost savings over the lifecycle of the vehicle when compared to conventional automobiles. By

removing 20 Jeep Liberty SUV's from the State Fleet and replacing them with Honda Civic Hybrids, the State could save approximately $17,000 in fuel cost each year and reduce CO2 emissions by 148,000 pounds per year. (Based on 12,500 miles/yr at $2.29/gallon, Jeep 20mpg, Civic 49mpg).

This is just one example of how state agencies can start to save money on fuel costs and reduce emissions from their transportation use. Every state agency should keep in mind the environmental and fiscal impact when they are choosing a vehicle for purchase. A simple rule is to purchase a vehicle with the best fuel economy available that still meets your agency's needs. By looking into what you use your vehicle for the most, you will often find that you don't always need to buy a 4x4 to meet your needs.

III. Existing Transportation Strategies

- The state has purchase 23 hybrid vehicles over the past 5 years and has many more on order for FY '06.
- The state currently has 378 vehicles that are capable of running on E-85 and we are working with an E-85 coalition to increase the availability of these pumps in the state.
- The state currently has 37 vehicles that are capable of running on a 20% biodiesel blend (B-20), and will be researching how to begin to use this renewable fuel in its vehicles.
- The state has the new Jeep Liberty diesel on its bid list; this vehicle gets approximately 20% better fuel economy than the conventional Jeep and comes from the factory with a biodiesel blend of fuel.
- Some state agencies provide preferred parking to individuals who drive hybrid automobiles or who carpool to work.

IV. Statewide Strategies to Increase the Efficiency of Transportation

- Purchase cleaner burning vehicles, EPA Tier II, Bin 5 or better.
- Set a goal to reduce the number of SUV's in the fleet. Many times a conventional sedan will perform the job just as well and get up to 50% better fuel economy.
- Tighten the justification requirements for those who want to order SUV's for their agencies.
- Work with fuel suppliers to have more E-85 and B-20 available to state fleet.

V. Agency Strategies to Increase the Efficiency of Transportation

- Work to educate employees on combining trips to reduce miles driven.
- Educate employees on driving conservatively, checking tire pressure monthly and keeping up to date on regular maintenance on vehicles.
- Reduce meetings away from office and encourage conference calls.
- Have agencies do an inventory of their fleet vehicles and conduct a needs assessment. Many times an agency will find they do approximately 20% of their travel in mountainous area and dirt roads but have 60% SUV's in their fleet. This is an area where changing the fleet to more conventional sedans can save thousands of dollars in fuel costs.
- Set up a telecommuting program at your agency for employees that have jobs that will allow them to work from home.
- Look at implementing flexible work schedules.

Action Steps to Increase Fleet Efficiencies

A variety of short-term actions state agencies can take to reduce their environmental impacts.

- Have all flex-fuel vehicles in agency use E-85 when practical. A map with station locaters will be in the car as well as a log sheet that shows when E-85 is used in the vehicle
- Create a checklist for vehicles with things to check at the beginning of every month. Is the vehicle due for maintenance? Check the tire pressure and add air if needed (increases fuel economy).
- No excessive idling for car to warm-up.
- Have fleet coordinators do a needs assessment for agency. How many SUV's and pick-up trucks does the agency really need? Can they replace some with cleaner burning more fuel-efficient cars?